CITY OF SCOTTSDALE
PLANNING & DEVELOPMENT SERVICES DEPARTMENT

INTERPRETATIONS & APPLICATIONS OF BUILDING CODES & REGULATIONS #97-3

CODE SECTION : **IMC 606.**

5/7/97 rev. 9/16/03

SUBJECT : DUCTWORK SMOKE DETECTORS

The requirements of the International Mechanical Code are that an air moving system, of one or more units, which supplies air to enclosed spaces within a building be equipped with smoke detectors which will shut down the system.

A building which has a common return air plenum which returns air to individual air handlers, with an aggregate cfm capacity in excess of 2000 cfm supplying multiple rooms is such a system.

A single air handler with a capacity in excess of 2000 cfm with individual return air ducts from multiple rooms and/or supplying air to multiple rooms is such a system.

A large room (such as a warehouse or grocery store) in which the air is taken directly from the room and supplied back to the same room, would not require such smoke detectors or automatic shut down.

An air moving system of more than one unit may have smoke detectors that shut down only the individual unit served.

The requirements of this section may not apply where designed smoke removal systems have been approved.

This requirement does not apply to units delivering 100 percent outside air.

Smoke detectors must be installed within the air conditioned space of the building, or provide documentation that the detectors which are to be used can withstand the ambient temperatures to be encountered.

Remote alarm indicators shall be installed below the ceiling level when in-duct smoke detectors are concealed.

In-duct smoke detectors shall be supervised by an annunciator panel, a fire alarm panel or a protective signaling system.

There are several exemptions to this section and requirements for additional detectors which are self-explanatory.